## PATENT CLAIMS

1. Device for long-term measurement and monitoring of strong magnetic fields, consisting of a magnetic field sensor (1) and an analyser unit (3) for evaluation of the signals (2) from said magnetic field sensor,
characterised in that
at least one memory (4) and/or at least one signalling unit (5) is optionally associated with said analyser unit and that said analyser unit is designed that it forms, from the signals of said magnetic field sensor, at least the integral as a function of time and/or the derivation as a function of time and stores these values in an associated memory or passes them on to a signalling unit.

2. Device according to Claim 1,
characterised in that
said magnetic field sensor and said analyser unit are integrated together in a common housing.

3. Device according to Claim 1 or 2,
characterised in that
at least one optical or optionally acoustical signalling means (8) is provided for indicating the measured values or for signalling that a limit has been exceeded, which signalling means is controlled by said analyser unit.

4. Device according to any of the Claims 1 to 3,
characterised in that
at least one additional limit discriminator (6) is provided in said analyser unit, which compares optionally one or several values computed from the signals of said magnetic field sensor against at least one predetermined limit and signals the entry of the value to the memory when this limit has been exceeded.

5. Device according to any of the Claims 1 to 4,
characterised in that
said magnetic field sensor is designed as multi-dimensional, preferably three-dimensional, field sensor and that said analyser unit is so designed that it computes at least the magnitude and optionally the orientation of the field vector from the signals of said magnetic field sensor.

6. Device according to any of the Claims 1 to 5,
characterised in that
additional means are provided for communication or for data exchange, such as an interface for linking an external computer or a memory card that may be read or written by external devices.

7. Device for long-term measurement and monitoring of strong magnetic fields, consisting of a magnetic field sensor (1) and an analyser unit (3) for evaluation of the signals (2) of said magnetic field sensor,
characterised in that
said magnetic field sensor and said analyser unit are jointly accommodated in a small housing that is preferably suitable for being fastened in or on a piece of clothing or even on or in a device or its package.